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Office of Dispute Resolution for Acquisition
Federal Aviation Administration
Washington, D.C.

FINDINGS AND RECOMMENDATION

Matter: Protest of Northrop Grumman Systems Corporation
Pursuant to Request for Offers DTFAWA-06-R-120906

Docket No.: 06-ODRA-00384

Appearances:

For the Protester: Richard A. Sauber, Esq., James J. McCullough, Esq.,
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Counsel for the FAA

For the Intervenor: Mark D. Colley, Esq., and Kara L. Daniels, Esq.
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I. INTRODUCTION

On September 1, 2006, Northrop Grumman Systems Corporation (“Northrop”) filed the above-captioned Protest at the Federal Aviation Administration’s (“FAA”) Office of Dispute Resolution for Acquisition (“ODRA”) challenging the award of a contract for the FAA’s Long Range Radar Service Life Extension Program (“LRR SLEP”) to the Raytheon Company (“Raytheon”). In its Protest Northrop argues that the FAA Air Traffic Organization Product Team’s (“Product Team”) technical evaluation of both the Northrop and Raytheon proposals was unreasonable, and contends that the resulting selection of Raytheon for contract award arose from a similarly unreasonable and disparate evaluation approach.

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For the reasons set forth herein, the ODRA finds that the FAA's technical evaluation was rationally based, and that substantial evidence supports the resulting scoring and selection of Raytheon for contract award. The ODRA therefore recommends that the protest be denied in its entirety.

II. FINDINGS OF FACT

A. Background

1. The primary mission of the FAA is to provide the safest, most efficient airspace system in the world.¹ To that end, the FAA has implemented the National Airspace System ("NAS"), which is comprised of the "most technically advanced technologies and complex aviation "system of systems" in the world which "links" a well-equipped network of pilots, air traffic controllers and support personnel" within a well-defined "supporting infrastructure" comprised of the FAA and the nation's airport facilities.²
2. The FAA currently uses and supports 126 primary en route radar facilities, and is chartered to provide radar services to all federal agencies requiring this data to meet their operational missions—including the Department of Defense ("DOD") and the Department of Homeland Security ("DHS"). *See Long Range Radar Restructuring Program.*³ The LRR systems that are the subject of this procurement are an essential component for sustaining/upgrading the current primary en route radar systems, infrastructure, and facilities used to provide air traffic control services in the NAS. *See ATB-440 In-Flight Primary: Long Range Radar Program Overview.*⁴

¹ See *The June 21, 2006 Subcommittee on Aviation Hearing on Air Traffic Control Modernization* published at: www.house.gov/transportation/aviation/06-06-21/06-06-21memo.html.

² See *FAA Capital Investment Plan for FY 2003-2007* at 1.

³ Published at: <http://www.faa.gov/asd/ia-or/longrangeradar.htm>.

⁴ Published at: <http://www.faa.gov/ats/atb/sectors/surveillance/440/programs/lrr.cfm>.

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3. The NAS is currently equipped with a vast network of radar surveillance capability that includes three “search and height find” long range radar (“LRR”) systems: the Air Route Surveillance Radar Model 1 (“ARSR-1”), the ARSR-2, and the AN/Fixed Position Surveillance (FPS)-20/60 long radar series. *See LRR SLEP Statement of Work (“SOW”), “Background,” ¶ 1.1 at C-7.*⁵ These three LRR systems are “owned, operated, and maintained by the FAA,” but pursuant to a cost-sharing arrangement, are jointly shared with the DOD and DHS for “vital national security purposes,” which includes providing en route primary radar coverage within the continental United States. *See Product Team Response, Legal Brief at 1.*
4. The Product Team reports that each of the LRR systems—the ARSR-1, the ARSR-2, and the AN/FPS-20/60 series—were designed “almost” sixty years ago, and depend on “increasingly obsolete and unsupported technology or designs from that era in many of their subassemblies.” *See Product Team Response, Exhibit No. 6, RFO, LRR SLEP SOW (hereinafter “SOW”), “Background,” ¶ 1.1 at C-7.* As a result, the identified LRR systems currently “contain a high percentage of obsolete parts.” *Id.*
5. According to the Product Team, the escalating cost of component parts combined with the unavailability of service assemblies has jeopardized the continued use of the three LRR systems for the critical “en route primary radar surveillance service” function they currently provide. *Id.*
6. Because of these concerns, in February and March of 2004, the FAA—after consulting with DOD and DHS—issued two separate Memorandum Agreements to Northrop and Raytheon that were designed to “solicit industry assistance in identifying solutions to maintain the service provided by these older radars for another 15 to 20 years.” *Id.*, ¶ 6 at 3. “Based upon the technical analysis

⁵ *See also “ARSR 4 Radar System,”* issued November 13, 1992, FAA Document No. FAA-E-2763 REV B CHG NOTICE 5, available at <http://aero-defense.ihs.com>.

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gathered” from Northrop and Raytheon, and relying on the DHS and DOD “input,” the Product Team “concluded that transmitters in [the existing] radars comprise the majority of the problems that have led to excessive operational costs and trends” resulting in a “loss in reliability and operational availability required to sustain the needs of DOD and DHS.” *SOW*, “*Background*,” ¶ 1.1 at C-7.

7. Relying on this data, the Product Team proceeded to develop “the minimum performance requirements” necessary to “exten[d] the service life of the radars by 15 to 20 years”—or until at least 2025. *Id.*, ¶ 8 at 3. The Product Team concluded that “the most effective way of maintaining the services provided” by the current LRR systems “was to replace the existing redundant tube transmitters with a single solid-state transmitter,” *id.*, ¶ 7 at 3, and to continue relying—“with modifications as necessary”—on each existing LRR system’s “existing antenna and common digitizer” equipment.” *Id.* For this reason, the Product Team devised a “new procurement strategy” that focused on tasking industry to design, produce, test, and implement a Service Life Extension Program (“SLEP”) “for these radars in the form of a common-configuration, single, solid-state transmitter to replace the redundant tube-type transmitter assemblies” in the ARSR-1, ARSR-2, AN/FPS-20 and AN/FPS-60 series radar systems—which the product team collectively “refer[s] to as the SLEP.” *Id.*, “*Purpose*,” ¶ 1.2 at C-7; *id.*, “*Limited Production Requirements*,” ¶ 3.0 at C-13.
8. In July and August of 2005, the FAA issued “two market survey announcements” which “invited industry to submit capability statements” for the new transmitter. *Id.*, ¶ 9 at 3. Based on the industry’s submitted responses, the FAA determined that “sufficient competition existed to compete the requirement.” *Id.*
9. On September 22, 2005, the Product Team issued a Draft SOW, *id.*, ¶ 11 at 3, and invited comments on the proposed solicitation requirement. *Id.* On December 19, 2005, following a series of responsive solicitation revisions, the Product Team issued the final version of the request for offers (“RFO”) that is the subject of this

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Protest. The RFO directed offerors to submit their proposals to the Product Team by March 16, 2006. *Id.*, ¶ 14 at 4.

10. Pursuant to the RFO, the successful contractor will be required to provide the service life extension of 68 current primary LRR systems. *See Product Team Response*, Exhibit No. 19, “*Evaluation Report for Factor 1, Technical (Proposal Volume I)*,” (hereinafter, “*Technical Evaluation Report*”), ¶ 1.1 at 1. As described in the RFO, the awarded work will include “being responsible for designing/providing new solid-state transmitters” and assuring their “compatibility with [existing] legacy receivers, modified as necessary.” *Id.* The RFO also provided that the successful awardee would be “required to install and support operational testing . . . at key sites.” *Id.* According to the detailed Evaluation Plan executed March 15, 2006, this “procurement is of significant complexity, and the “[t]echnical risk is moderate.” *See Product Team Response*, Exhibit No. 7, *Evaluation Plan* (hereinafter “*Evaluation Plan*”) at 4 and 5.
11. Prior to the Solicitation’s closing date, the FAA invited interested offerors to tour an actual LRR site. *Legal Brief*, ¶ 14 at 4. According to the Product Team, three offerors—Northrop, Raytheon, and Sensis—requested and completed these site visits. *Id.*
12. The Product Team also reports that before the closing date, it responded to numerous industry questions via e-mail, and also posted each response “on the FAA contract opportunities website” as follows:

<p style="text-align: center;">FAA Responses Posted To: http://fast/faa/gov/index.htm</p>
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January 30, 2006
February 14, 2006
February 24, 2006
February 27, 2006
March 2, 2006
March 6, 2006
March 8, 2006
March 31, 2006

Id., ¶ 16 at 4

According to the Product Team, the “majority” of these industry comments” pertained to the “Technical and Cost/Price requirements” in the RFO. *Id.*

B. Relevant RFO Provisions

a. Description of the LRR SLEP Requirement

13. The “Scope” in the RFO’s Statement of Work (“SOW”) “define[d] the tasks for replacing the [obsolete] transmitter and the related components” in each of the existing LRR “systems with a solid-state transmitter” that “includes:”
- a) designing the modification
 - b) production (optional), implementing (optional), and testing the design
 - c) sparing
 - d) repairing
 - e) training
 - f) installing Limited Production (LP) kits at key sites
 - g) supporting operational testing by the Government and
 - h) developing repair and lifecycle capabilities for the Government.

SOW, “Scope,” ¶ 1.3 at C-7.

14. The SOW also required the existing LRR equipment to be incorporated within each proposed LRR SLEP design, and advised that the “performance and design goals” set forth throughout the SOW would also have to be modified to accommodate that design. *Id.*

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15. In addition, the SOW established several “options” which required pricing for implementing “the resulting modification” at the radar sites and “incorporat[ing] the CD-2 Search Target Extractor (STE) functionality” into the proposed transmitter design. *Id.* at C-7 – C-8. *Id.*

b. The RFO Amendments

16. The record shows that in response to industry questions, the Product Team issued two amendments to the RFO. *Legal Brief*, ¶ 18 at 4. The first amendment was issued on January 27, 2006, and was reportedly comprised chiefly of “typographical corrections.” *Id.*; *see also RFO, Amendment No. 0001* dated January 27, 2006.

17. The second amendment to the RFO was issued on February 28, 2006, and substantively revised numerous solicitation provisions for “clarity,” including the Section B “Supplies and Services Prices/Cost” schedules; the SOW; the Section L “Instructions, Conditions and Notices to Offerors,” and several Section M “Evaluation Factors for Award.” *See RFO, Amendment No. 0002* dated February 28, 2006.

c. The Evaluation and Award Provisions

18. The RFO contemplated the award of a firm fixed-price, time and materials type contract, *RFO*, “*Type of Contract*,” ¶ L.14.8 at L-9, to the offeror with the “best value” offer—which the solicitation “defined as the proposal that present[s] the most advantageous solution to the FAA, based on the evaluation of technical, cost/price, past performance, small business utilization and other factors specified” in the RFO. *Id.*, “*Award Selection*,” ¶ M.1.1 at M-1.

19. The criteria governing the Product Team’s evaluation of each offeror’s Technical Volume appeared in the following “Evaluation” paragraphs of the RFO: (1)

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“Basis for Award,” ¶ M.1; (2) “Evaluation Process,” (3) ¶ M.2; “Evaluation Factors,” ¶ M.3; (4) “Technical Evaluation,” ¶ M.4; and (5) “Evaluation,” ¶ M.4.5; at M-1 – M-6.

20. Paragraph M.1 of the RFO specified that the basis for award would be made according to the four evaluation factors contained in Section M of the RFO, which were listed in “descending order of importance,” and for which each offeror was required to submit a separate volume:

- Factor 1: Technical
- Factor 2: Cost/Price
- Factor 3: Past Performance
- Factor 4: Small Business Utilization

RFO, “*Evaluation Factors*,” ¶ M.3 at M-3; *Id.*, Exhibit No. 6, *Amendment No. 0002*, “*Submission of Offers*,” ¶ L.14.1 at L-6.

21. In addition to these four required proposal volumes, the SIR also required offerors to submit a “Minimum Qualification Requirements brief,” demonstrating compliance with the corresponding qualification criteria set forth in that same “Evaluation Factors for Award” section of the SIR. *RFO*, “*Minimum Qualification Requirements*,” ¶ L.5 at L-2.

22. Each of the four submitted volumes was to be evaluated by a separate evaluation team. *RFO*, ¶ M.2 at M-2. While the Technical Factor was identified as the “most important,” the RFO explained that as “technical differences between offers become smaller, the more important the cost/price, past performance and Small Business utilization will become.” *Id.*, “*Evaluation Order of Importance*,” ¶ M.1.3, at M-1 — M-2.

d. The Proposal Preparation and Submission Instructions

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23. The RFO repeatedly emphasized that sufficient proposal detail was of paramount importance, and would play a role in both the technical and overall evaluation of proposals. The “General SIR/RFO Instructions” provided in this regard that:

Offerors must submit factual and concise written information as requested in the SIR/RFO. Proposals should be specific enough to provide the FAA evaluators with enough information to be able to judge the technical and financial ability of the offeror to conduct this requirement. Proposals that merely offer to conduct a program in accordance with the FAA’s requirements as described in the SOW, will be considered unacceptable, as will those proposals that merely paraphrase section C of the SIR/RFO or which use nonspecific phrases such as “in accordance with standard procedures” or “well known techniques.”

Id., ¶ L.13.2 at L-6.

These instructions also warned offerors that:

[o]mission of or a sketchy response to the requirements of this SIR/RFO may render a proposal incomplete as it relates to the requirements of the SIR, and therefore may cause it to be found unacceptable for further consideration.

Id., ¶ L.13.3 at L-6.

The RFO’s “Proposal Response Instructions” similarly advised that:

These instructions prescribe the format of proposals and describe the approach for the development and presentation of proposal data. They are designed to ensure the submission of information essential to the understanding and comprehensive validation of proposals.

Id., ¶ L.14 at L-6.

A separate “Completeness” Provision in the RFO also emphasized that:

The Government will review all proposals to ensure completeness, response to all elements, and adherence to Section L . . . of the solicitation. Those proposals that do not meet these requirements will be rejected. The resultant Contractor is responsible for compliance with the entire

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Statement of Work (Section C), and all attachments of the solicitation/contract.

Id., ¶ L.14.5 at L-9.

24. The RFO also specified that as part of the technical evaluation of each offeror’s capability, “the FAA will also consider compliance” with the Section L “instructions.” *Id.*, ¶ L.12 at L-5. According to Section L, it was “critical that each offer” be “fully responsive to the SIR/RFQ, without exception of any provision,” and that the supplied “information shall be clear and complete.” *Id.* Section L further advised that “[w]hen evaluating an offeror’s capability to perform the prospective contract, the FAA will also consider compliance with these instructions included in the SIR/RFO.” *Id.* The SIR also warned that the “FAA will consider an offeror’s non-compliance with all instructions as indicative of conduct that the FAA may expect from the offeror during contract performance.” *Id.*

e. The Technical Volume Requirements

25. The RFO provided that each offeror’s Technical Volume submitted for Factor 1 would be evaluated according to the following “factors, sub-factors and sub-elements” which were “listed in descending order of importance” in the RFO:

Factor 1: Technical	
Sub-Factor 1	Program Management Plan (PMP) [In accordance with] IAW CDRL A01 and DID SLEP-AO1
Element 1.1	Technical Solution
Element 1.2	Other Sections of the PMP [requiring compliance with approximately thirty “sub-elements” listed under this Element and corresponding to the PMP requirements, <i>e.g.</i> , “Risk Management” and “Test and Evaluation

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	Requirements.]
Element 1.3	VRTM [Verification Requirements Traceability Matrix]
Element 1.4	Schedule Planning and Control

RFO, “*Evaluation Factors*,” ¶ M.3 at M-3, and “*Evaluation*,” ¶ M.4.5 at M-5.

26. Within identified Factor 1 technical evaluation areas, there were 14 requirements that had a higher weighting. These categories included: evaluating whether the proposed LRR system was “mature enough to support a quick deployment” after contract award; evaluating “the credibility and maturity of the offeror’s data and analysis that is used to support the verification of meeting the performance requirements provided in” the offeror’s Blake Model chart; determining system “reliability and availability analysis and visibility,” as well as assessing “implementation strategy;” and determining whether the offeror has “adequately described the support and maintenance strategy with sufficient detail and supporting analysis” so as “to anticipate a high probability of success.” RFO, *Table 2 Requirements Having Higher Weight* at 7.
27. The RFO specified that “the Program Management Plan . . . is the only [Contracts Data Requirements List] required with the RFO Response and is to be provided as Proposal Volume I “Technical.” This same provision further advised that:
- It is intended that the Program Management Plan submitted by the offeror, in Volume I, will become part of the resultant contract award. FAA approval is required on the PMP as a condition of award.
- Id.*, §L.17.1.6.
28. The Contracts Data Requirements List items and the Data Item Descriptions that comprised the Project Management Plan (“PMP”) were very detailed and appeared in “Category A” of Attachment J.2 of the RFO. *See Attachment J.1, “Description of CDRL & DID Forms (Requirements/Instructions), Introduction*, ¶ 1.0 at 1. The “Preparation Instructions” for the PMP required it to “include flow

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charts, organization charts, printouts, etc. . . . that would illustrate or assist in describing elements of the PMP.” See Attachment J-2, “Format,” ¶ 10.1 at A01-1.

29. In addition, the PMP instructions further specified that the PMP submission must include a detailed “Technical Solution” to demonstrate how the requirements set forth in Section 3 of the SOW would be implemented. *Id.*, “Technical Solution,” ¶ 10.2.13 at A01-7.
30. The RFO also required each Technical Volume to “document the processes and procedures established by the offeror/contractor to organize, plan, schedule, implement, control, analyze, and report on all elements of the program.” *Id.* Offerors were further instructed that their Technical Volume submissions had to “address and meet all ‘SHALL’ and ‘MUST’ requirements in the SOW,” *id.*, and “be specific and comprehensive with regard to how each of the ‘Shall’ and/or ‘Must’ requirements” contained in the SOW “will be met.” *Id.* Finally, offerors were also instructed to describe a “full understanding of the work required and the ability of the offeror’s organization to ensure the requirements of the SIR/RFO are met.” *Id.*
31. Finally, for the “Schedule Planning and Control” Element specified under Technical Factor 1, offerors were required to prepare their proposals in accordance with [Data Item Description] SLEP-A01, ¶ 10.2.5, which directed offerors to:
- document (and implement) the process for satisfying the requirements of Schedule Planning and Control [in accordance with] the following and SOW Section 3.1.4. This section shall describe the . . . process for developing and maintaining the [Master Integrated Program Schedule] . . . describe how the [Master Integrated Program Schedule] is used . . . and how it is integrated . . . “

This section further required the submission of an established “schedule based on a logical and efficient sequence of events designed to accomplish the tasks

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described in the Contract at SOW Section 3.1.4, “Schedule Planning and Control,” including all options.” *Id.*

32. The record shows that Northrop proposed a Master Integrated Program Schedule (“MIPS”) of 24 months, *see Northrop Grumman Volume I, Appendix D, Master Integrated Schedule*, while Raytheon proposed a MIPS with a duration of [DELETED]. *See Raytheon Volume I, Appendix B, MIPS.*

f. The Risk Evaluation Factor

33. Several sections of the RFO emphasized that each offeror’s Technical Volume would be evaluated for technical risk. First, the “Technical Evaluation” section of the RFO stated that the Product Team evaluators would “score how complete and adequate the requirements for the PMP are addressed” in each offeror’s proposal, and further advised that “[r]isks that are identified during evaluation will be evaluated for consequence and likelihood” according to the “general evaluation criteria” of “Completeness/Adequacy” and “Risk.” *See RFO*, ¶ M.4.3 at M-4. This section of the RFO also explained that:

Risk:

Risk will be evaluated from a technical point of view and is applicable, for evaluation purposes, to Factor 1, Technical (Proposal Volume I), only.

- a. **Risk Likelihood** – The probability an identified risk (a situation or circumstances which creates uncertainties about achieving program objectives) would occur.
- b. **Risk Consequence** – The degree to which an identified risk would impact (have a negative consequence) technical performance and schedule.

(Emphasis in original); *id.*, ¶ M.4.4 at M-4.

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34. The RFO's specified "Evaluation Process" also confirmed that "[r]isk considerations are specific to the technical evaluation only," *id.*, ¶ M.2.2 at M-2. and both the "Evaluation Factors" and the "Evaluation" sections of the RFO similarly required each offeror's Technical Volume to address, in part, the "Risk Management" sections of the PMP, the CRDL and the DID. *See RFO*, "Element 1.2," ¶ M.3 at M-3 and "Element 1.2," ¶ M.4.5 at M-5.
35. To that end, the PMP's "Preparation Instructions" specifically required the inclusion of a separate "Risk Management" section in each Technical Volume describing detailed "plans and procedures for identifying and reporting risks . . . and mitigating those risks." *See RFO* at A01-4.
36. The RFO also required the submission of a "Requirements and Design Description (R&DD)" that was required to include a "detailed design" of the LRR SLEP hardware; a "mechanical analysis and design program" for the proposed modifications; an "electrical power design" showing how the proposed LRR design "complies with the electrical safety requirements of NFPA 70 and FAA-G-2100H;" and defined heat dissipation and interface design requirements.

g. The Blake Chart Analyses Requirement

37. The Air Route Surveillance Radars being updated pursuant to this requirement are long range radars that detect aircraft position, and then transmit that position energy to a receiver using reflected energy.⁶
38. Of relevance to this discussion, a radar signal is generated by a powerful transmitter and received by a highly sensitive receiver. The transmitter broadcasts a beam of electromagnetic waves by means of an antenna, which

⁶ *See NAS Capital Investment Plan for FY 2007-2011*, "Surveillance," ¶ 4.2.3, at 20.

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concentrates the waves into a shaped beam and points the radar beam in a specified direction. When the beam strikes an object—a “target”—in its path, some of the beam’s electromagnetic waves are reflected from the object as an “echo” signal that is sent back—or “returned”—to the radar’s receiving device which picks up, interprets and translates the echo signal into a visual signal on the screen of a radar display device—usually a computer monitor. Within each radar system’s environment, there are many radio signals that can potentially interfere with its resolution; each radar system’s ability to simultaneously extrapolate and resolve multiple-echo signals in its designated environment is referred to as the resolution range of that radar system. *See generally Declaration of William A. Skillman; Declaration of David K. Barton.*⁷

39. There are a number of technical design characteristics that can individually, and/or in combination, affect the range resolution of a radar system. Examples of such features include the power of the transmitter, the wavebeam emission bandwidth, the dimensions of the radar’s intra-pulse modulation, and the characteristics of the wavelength. *Id.*
40. The Blake Radar Altitude Performance Model that was specified in the RFO is a well-established mathematical formula or “standard” that generally uses twelve mathematical design “variables” or “values” to accurately calculate and predict a radar’s minimum and maximum performance range. *See Michael R. Ducoff’s Introduction to Radar; Declaration of David K. Barton* dated November 20, 2006, ¶¶ 27-36 at 8-12. For this competition, the Chairperson of the Technical Evaluation Team reports that the FAA “based the competition around” the Blake Model because it best “characterize[d] the existing performance of the current legacy [LRR] systems.” *Product Team Response, Exhibit No. 2, Declaration of John Farr*, ¶ 17 at 12.

⁷ *See also The Loss of Information Due to Finite Sample Volume in Radar-Measured Reflectivity by I.I. Zawadski; Radar Basics* available at www.radartutorial.edu; *From Analog to Digital Radar* available at www.uais.org/DisplayIssues.htm.

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41. To that end, Section 3.2.1 of the SOW, “System Requirements,” specified that each offeror was required to “use radar modeling in the form of a Blake Radar Altitude Performance Model to compute comparable range curve expectations between the LRR SLEP design and existing system baseline performance parameters set forth in Appendix C” of the SOW. *SOW*, ¶ 36 at 7 (citing *Product Team Response*, Exhibit No. 6 at 28-31). The SOW instructed offerors to “document legacy Blake Charts and use those computed for the LRR SLEP designs” and to include these analyses (“Blake Chart Analyses”) in their submitted Technical Volumes to “provide detailed visibility into how the factors used in the radar modeling are derived.” *Id.* The SOW further specified that each offeror’s proposed LRR design would be evaluated using the offeror’s Blake Chart analyses to determine and assess whether the proposed “LRR SLEP designs comply with the following requirements” summarized below:

- Operating Frequency between 1215 – 1350 MHz;
- Detection Maximum Range up to 197 nmi;
- Radio Frequency (RF) receiver dynamic range of “at least 70 dB at the output of the down converter to the receiver signal mixer;
- Radar Operational availability is at least 99.35%
- Mean Time Between Critical Failures of at least 2190 hours;
- Modifications necessary to mitigate additional heat generated by the LRR SLEP;
- Demonstrated interface with the existing transmitter system;
- Demonstrated interface with the existing CD-2 functions and performance;
- Moving Target Indication (“MTI”) processing “first blind speed of at least 2000 knots” and a “clutter cancellation ration greater than 40 dB;”
- Minimum range separation performance of 5 nmi or less.

See SOW, ¶ 3.2.1 at C-28 – C-31.

42. The Blake Chart Analyses are significant to this procurement because they enable the offeror and the FAA to evaluate, test and predict the feasibility of a particular radar design’s technical success. Using the Blake model and its established radar range equation, various features of a proposed design can be mathematically determined, predicted and tested. For example, according to the Blake Model, an “expression” can be derived for the “received power” in terms of the transmitted

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power, antenna gain, wavelength, slant range and backscattering for a point target. The Blake model radar range equation can also be used to determine the effect of modifying various radar characteristics on the received power for a given target at a given range. *See generally Declaration of John Farr; Declaration of William A. Skillman; and Declaration of David K. Barton.*⁸

C. The Evaluation

a. The Evaluation Plan

43. The Product Team reports that the Evaluation Plan for this acquisition was approved on March 15, 2006, *see Product Team Response, Legal Brief*, ¶ 52 at 8, and included “detailed descriptions of . . . the evaluation and scoring schemes” for “each evaluation factor, sub-factor, element and/or criteria.” *Id.*, ¶ 57 at 9. The Evaluation Plan also specified each evaluation team chairperson’s “responsibilities, which included reviewing and discussing [evaluation] ratings in an attempt to reach consensus,” and documenting evaluation differences “if consensus could not be reached.” *Id.*
44. By the March 16, 2006 closing date, three proposals—including those submitted by Northrop and Raytheon—were received. *Id.*; ¶¶ 49-50 at 8.
45. In accordance with the Evaluation Plan, four separate evaluation teams were formed to evaluate the three submitted proposals. *Id.*, ¶ 56 at 9. Each evaluation team was responsible for one evaluation factor—and was “given only that portion of the several proposal volumes related to its particular review.” *Id.* According to the Product Team, “there was a Technical Team, a Cost/Price Team, a Past Performance team and a Small Business Utilization Team.” *Id.*, ¶ 55 at 9. In addition, on March 21, 2006—prior to beginning any proposal review or

⁸ *See also Michael R. Ducoff’s Introduction to Radar Tutorial Program*, available at Michael.r.ducoff@lmco.com; *Radar Basic Principles* at www.radartutorial.eu.

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evaluation—the record shows that each member of each evaluation team received “evaluation training.” *Id.*, ¶ 52 at 9.

46. The Chairperson of the Technical Evaluation Team (“TET”) reports that the eighteen evaluators who were tasked with evaluating each offeror’s Technical Volume have, on average, at least fifteen years of relevant experience in radars and surveillance as a result of various backgrounds in the United States Air Force, providing FAA operations and engineering support, and being assigned to the Product Team’s Program Office. *See Declaration of John Farr*, ¶ 1 and ¶6 at 1.
47. During the evaluation, the TET “compared the transmitted energy of the [existing] legacy systems with the proposed designs from Northrop Grumman and Raytheon.” *See Declaration of John Farr*, ¶ 21 at 3. The results of that comparison showed that the energy transmitted by the Northrop and Raytheon designs “[DELETED] than the transmitted energy of the FPS series radars,” as follows:

Radar System	Transmitted Energy Per Radar Pulse
Current FPS Radar	12 Joules
Raytheon Proposal	[DELETED] Joules
Northrop Grumman Proposal	[DELETED] Joules

Id., ¶ 21 at 3.

48. Based on these [DELETED] in power, the TET determined that in order to “meet the same detection performance” with the same reliability as the existing legacy systems, the offerors “would have to develop improved methods for receiving reflected energy in order to detect a target at the same range. *Id.*, ¶ 22 at 3. As a result, the TET determined that “improved detection methods had to be provided and explained” by both Northrop and Raytheon “in their Blake model, with detailed visibility with respect to their proposed design.” *Id.*, ¶ 23 at 4.

b. Technical Discussions And Clarifications

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49. The Product Team reports that following its initial review of each offeror's submitted Technical Volume, it issued several rounds of "technical related questions" and requests for clarifications to Northrop and Raytheon on the following dates:

- April 14, 2006: Technical Related Questions/Clarifications
- April 21, 2006: Cost/Price-related Questions/Clarifications
- May 4, 2006: Technical and Cost/Price Questions/Clarifications
- June 13, 2006: Requests for Clarification/Proposal Extension

Id., *Legal Brief*, ¶¶ 59-62 at 9-11.

50. The record shows that Northrop submitted its responses to each set of the Product Team's questions on the following dates:

- April 25, 2006
- April 27, 2006
- May 11, 2006
- June 27, 2006

Id., *Legal Brief*, ¶ 60 at 10.

51. Raytheon's responses to the Product Team's questions were submitted on:

- April 26, 2006
- May 3, 2006
- May 15, 2006
- May 25, 2006
- August 16, 2006

Id., *Legal Brief*, ¶ 63 at 10.

c. Technical Clarifications Issued To Northrop

52. The TET identified the following technical concerns about Northrop's proposed technical solution. First, the TET noted that Northrop's design "[DELETED] than the current FPS radar and Raytheon's design." *Id.*, ¶ 25. Next, "after working through some of the parameters of the Blake analysis provided by Northrop . . . it appeared that [DELETED] were not included and that the

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parameters present were not explained.” In addition, the TET found that Northrop had not “describe[d] how they were derived, or the references or assumptions that were used.” *Id.*, ¶ 26. In summary, the TET identified the following technical concerns in Northrop’s Technical Volume:

- Loss from some of the components in the receive chain were excluded
- Was the Lens Effect excluded in deriving the atmospheric loss value?
- What elements were in the Signal Processing Loss value?
- The formula, computations, references, and general method of deriving visibility/detectability factor were missing
- There was insufficient information to explain the Blake Model numbers
- Could not tell if Northrop Grumman had considered all relevant elements in the Blake Model
- Computations, references and source of any data were missing from the propose LRR maximum range estimate

Id., ¶ 27-¶30 at 4-5.

53. In an April 14, 2006 “Required Clarifications” request, Northrop was directed by the Contracting Officer to “provide more detail/information/computations for normal processing, include a data source, reference, etc., for each parameter in the Blake analysis.” *Product Team Response*, Exhibit No.11, ¶ 7 at 2. The April Clarifications advised Northrop that the requested information was needed so that “the government can reproduce the exact values presented for the parameters which Northrop had identified as the foundation for its technical approach, and which were specifically referenced and requested in the April Clarifications for the following technical characteristics reported in Northrop’s Technical Volume:

- signal processing loss
- the duplex gain
- the Swerling 1 to 3 conversion
- the visibility/detectability factor calculation
- the CFAR loss of the CD-2
- the atmospheric loss factor including calculations for absorption loss and lens effect;
- front end losses (including transmit loss, receive loss, and noise).

Id.

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54. While the Product Team's Clarifications had expressly requested that Northrop provide all of its "detail[ed] computations and parameters," the record shows that Northrop's revised technical proposal did not include these particulars. Instead, Northrop's revised proposal advised the Product Team that:

The legacy Blake charts and those computed for the SLEP systems will be documented in the F&DD [and post-award contract meetings] where detailed visibility will be provided into how the factors in the radar modeling are derived.

See Northrop Revised Technical Volume, § 1.13.2.3.2 at 124.

55. On May 4, 2006, a second "Required Clarification—Technical Volume" was issued to Northrop which included the following questions about Northrop's proposed technical solution and Blake Chart Analyses:

- Please provide clarity as to what power point on the [compressed] pulse [width] is being measured ...
- Appendix C . . .states Blake Chart receiver noise losses will be tested and will not exceed 1.85 dB. However, [Northrop's] PMP table . . .shows receiver losses at 1.94 dB. Please clarify.

See Product Team Response, Exhibit No. 11, Required Clarifications for Northrop Grumman, Enclosure (2), ¶ 4 and ¶ 5 at 3.

56. In response to these questions, Northrop did not provide a substantive response; instead, Northrop advised that the identified pulse width "will be updated at contract award" to "between 2.0 and 2.2. microseconds." With respect to the Blake Chart receiver noise losses, Northrop advised that the identified "value" in its Technical Volume "was incorrect" but "will be modified at contract award to agree with the 1.95 dB . . .shown in the Blake Chart Analysis. *Id.* at 3.

57. The record also shows that in response to several other technical questions by the Product Team—for example, clarifications about "heat dissipation" in Northrop's proposed LRR SLEP or questions about why Northrop's proposed transmitter and

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frequency generator “may not meet all the requirements” in the RFO—Northrop responded by advising that the relevant section of its proposal “has been updated.” *Id.* at 4; *see also Northrop Technical Volume* at 141-143.

d. Technical Clarifications Issued to Raytheon

The record shows that Raytheon was also asked to clarify various aspects of its technical solution, including elements pertaining to its submitted Blake Chart Analyses, as follows:

- Please provide detail on the calculation of the [DELETED] for the ARSR system Blake analysis
...
- Visibility factor uses integration of [DELETED] beamwidth—but . . . since the proposed [DELETED] this is no longer correct . . . [p]lease address and modify as appropriate.

Product Team Response, Exhibit No. 12, *Required Clarifications to Raytheon* dated April 14, 2006.

58. In response, the record shows that Raytheon submitted [DELETED]. In addition to providing this analysis, Raytheon also reported that it had adjusted one parameter of its [DELETED]. *Id.*, *Raytheon Response to Required Clarification Nos. 9 and 10*, dated May 2, 2006.

D. Technical Evaluation Results

59. In letters that were issued to each offeror on June 13, 2006, and during separate teleconferences that were conducted with each offeror the following day, the contracting officer reported that the Product Team “was nearing the completion of its evaluation” and would soon make “selection and award.” *Id.*, ¶¶ 63-64 at 10. According to the Product Team, Northrop and Raytheon were each separately asked “whether there were areas in their proposed price that might merit further

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discussion and update.” *Id.* Each offeror was also asked to extend the term of its proposal “validity” to August 16, 2006. *Id.*, ¶¶ 65-66 at 10.

60. On June 13, 2006, Raytheon submitted its proposal to the Product Team, along with the requested extension and a revised price. *Id.*, ¶ at 68 at 11. On June 27, 2006, Northrop submitted the proposal extension sought by the Product Team—but did not submit any other proposal changes.⁹ *Id.*, ¶ 67 at 11.

61. Under the RFO, the maximum technical point score that any offeror could receive for Volume I—Technical was 95%. *Product Team Response, Technical Evaluation Report*, Exhibit No. 20, ¶ 3 at 8. By July 12, 2006 Technical Evaluation Report identified the following results¹⁰:

<u>Offeror</u>	<u>Technical Evaluation Score</u>
Raytheon	79.5%
Northrop	73.5%

The itemized breakdown of these technical evaluation results reveals:

Scoring Results	Raytheon	Northrop
Total (95%)	79.5	73.5
Technical Solution (54%)	[DELETED]	[DELETED]
Completeness/Adequacy	[DELETED]	[DELETED]
Regular Requirements	[DELETED]	[DELETED]
Higher Weighted Requirements	[DELETED]	[DELETED]
Risk	[DELETED]	[DELETED]
Other Sections of the PMP (17%)	[DELETED]	[DELETED]
Completeness/Adequacy	[DELETED]	[DELETED]
Regular Requirements	[DELETED]	[DELETED]
Higher Weighted Requirements	[DELETED]	[DELETED]
Risk	[DELETED]	[DELETED]
VRTM (15%)	[DELETED]	[DELETED]
Completeness/Adequacy	[DELETED]	[DELETED]
Regular Requirements	[DELETED]	[DELETED]
Higher Weighted Requirements	[DELETED]	[DELETED]
Risk	[DELETED]	[DELETED]

⁹ The Product Team briefed DOD and DHS “on the status of the LRR SLEP acquisition” on June 28, 2006. *Id.*, ¶ 69 at 11.

¹⁰ According to the Technical Evaluation Report, the third’ offeror’s proposal “presented a technically unworkable solution and was found to be technically unacceptable.” *Id.*, ¶ 3.1, “Offeror 1,” at 9.

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Schedule (9%)	[DELETED]	[DELETED]
Completeness/Adequacy	[DELETED]	[DELETED]
Regular Requirements	[DELETED]	[DELETED]
Higher Weighted Requirements	[DELETED]	[DELETED]
Risk	[DELETED]	[DELETED]

Id. at 8.

62. According to the record, each offeror’s “most probable . . . contract cost/price” was evaluated as follows:

Cost/price value	Offeror # 2 [Raytheon]	Offeror # 3 [Northrop]
Firm Fixed Price Basic	[DELETED]	[DELETED]
Firm Fixed Price Options	[DELETED]	[DELETED]
Total Firm Fixed Price	[DELETED]	[DELETED]
Time & Materials	[DELETED]	[DELETED]
Total	\$260,541,475	[DELETED]

Id.

63. Overall, the record shows that Raytheon’s technical score was six percent (6%) higher (79.5) than Northrop’s (73.5), and that Raytheon’s price was calculated to be “within [DELETED]” (\$260,541,475) of Northrop’s lower price [DELETED]. *Product Team Response, Source Evaluation Team Report*, Exhibit No. 21 and *Supplemental SSO Report*, Exhibit No. 23. Under the past performance factor, Northrop was evaluated with 4.95 points (out of 5), which was higher than Raytheon’s score of 4.65 points. Both offerors were also rated “Acceptable” under the Small Business Utilization Factor. *Id.*

64. Based on these results, both the Northrop and Raytheon Technical Volumes were found to be technically acceptable. However, while Northrop’s proposal was evaluated as being the second highest technically, and credited for proposing a “mature” technical approach, the record shows that both the Product Team and the Source Evaluation Team nevertheless concluded that there was “a significant risk that [Northrop’s] technical solution might not meet some performance requirements” of the RFO. *Id.* In particular, the record shows that due in large

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part to a reported “lack of detail,” the Northrop technical solution was evaluated as “includ[ing] significant risk in meeting some SOW performance requirements” because:

[Northrop’s] technical approach has no performance margins to address technical issues that inevitably arise during the development process. [Northrop’s] technical approach had practically no flexibility to address developmental technical issues or life-cycle support issues. [Northrop’s] solution may be difficult to support for an extended life-cycle due to a lack of flexibility in the technical approach. [Northrop’s] deployment schedule may contain more risk than is represented in the technical proposal.

Id.

65. Overall, Northrop’s Technical Volume was credited with three evaluated “Technical Solution” strengths, and one “VTRM” strength, as follows:

Technical Solution

- As a result of breadboarding and field testing during the [prior] LRR SLEP analysis effort, and as a result of proposing a transmitter that was already in production, this Offeror’s design maturity exceeded expectations.
- [Northrop] provided a high level of completeness and detail that exceeded expectations in describing the granting of full rights to the Government on data developed on this contract, with no proprietary tools or processes. Expectations were exceeded when the Offeror also proposed granting rights for previously developed equipment and software that would be used in [Northrop’s] proposed solution.
- The use of a current [DELETED] in [Northrop’s] proposal exceeded expectations, as there was more development work that was expected in this area.

VTRM

- The VTRM exceeds requirements by presenting a risk column that gave an assessment of risk for system requirements.

Product Team Response, Technical Evaluation Team Report, “Strengths,” ¶ 3.3.1 at 21.

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66. According to the record, the technical evaluation team also identified seventeen weaknesses in Northrop's Technical Volume which largely related to an evaluated lack of technical description and detail. For example, the "plans and procedures for identifying and reporting risks" that had been proposed by Northrop were found to be a weakness because the proposed solution "did not consider a number of factors"—*i.e.*, "there were no performance margins." *Id.*, "Weaknesses," ¶ 3.3.3 at 22. Northrop was also evaluated with weaknesses because its Technical Volume "lacked" or "failed to provide sufficient detail;" the evaluators also determined that Northrop's "Blake chart analysis" was a "weakness" because it "presented . . . little detail and could not readily be fully duplicated by the" FAA. *Id.* Finally, the Northrop proposal was also evaluated with a "weakness" because it presented "an incomplete verification of the requirements." *Id.*

67. Finally, the record reveals that in addition to the above-referenced strengths and weaknesses, Northrop's proposal was assessed with fifteen evaluated technical "risks," for reasons that included: its "inaccurate Blake model assumptions;" "no performance margins;" "little flexibility to modify the design;" "unpredicted system design adjustments;" and a "highly compressed" performance schedule "in terms of testing and delivery" that the Product Team concluded "may result in inadequate testing in order to meet the schedule." *Id.*, "Risks," ¶ 3.3.4 at 24-25.

68. In contrast, Raytheon's technical solution was evaluated with presenting five technical strengths, summarized below as:

- [DELETED];
- The technical approach [DELETED] . . . [these] requirements were exceeded in more than one instance . . . [DELETED] and can be used to lower [DELETED];
- The overall technical approach exceeded requirements by providing a considerable amount of [DELETED]. An example would be the [DELETED] which [DELETED];

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- The comprehensiveness and overall technical approach of the [DELETED] in the Common Digitizer Model 2 (CD-2) replacement design often exceeded expectations and requirements [are features that] can be used to lower the risk to development and life-cycle support.

Id.

69. While Raytheon’s proposal “thoroughly addressed the requirements and received the highest overall technical score,” the Product Team nevertheless reported [DELETED] evaluated weaknesses in the Raytheon technical solution. First, the evaluators indicated that Raytheon’s [DELETED]”; Raytheon was also evaluated as having several weaknesses because of several features that “indicated that the design approach [DELETED].” Some concerns about Raytheon’s proposed [DELETED], along with a lack of information “raised some questions as to the [DELETED]” including whether or not Raytheon would be able to [DELETED] with its PMP, “whether the [DELETED] was reasonable,” and whether the proposed transmitter was [DELETED]. Finally, the evaluators identified Raytheon’s proposed [DELETED] as a weakness and “somewhat unsatisfactory,” and identified [DELETED] “weaknesses” surrounding the requirement to [DELETED].” *See Product Team Response, Exhibit No. 20, LRR SLEP Procurement Briefing to the SSO.*

70. The Raytheon technical solution was also assessed with a [DELETED] “risks,” in part because the proposed [DELETED] and because [DELETED] could “result in program delays.” Other identified risks arose from apparent evaluator concerns that the “integration of all subsystems . . . [DELETED] and that a [DELETED] could result in the “failure to adequately support the system after deployment.” Additional “weaknesses” were recorded that stem largely from concerns raised by [DELETED] (*e.g.*, adequacy of the proposed [DELETED] sufficiencies of Raytheon’s proposed [DELETED]). *Id.*

E. The Selection of Raytheon For Contract Award

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71. On July 13, 2006, the Product Team’s designated source evaluation team (“SET”) provided an in-person “Procurement Briefing” to the SSO which was based on an interactive 25-page slide show presentation that included summaries of each individual team’s evaluation report. *Id.*; *see also Product Team Response*, Exhibit No. 20, “*LRR SLEP Procurement Briefing to the SSO*” at 20. After completing the Briefing’s question and answer session, the Product Team provided the SSO with copies of the underlying individual evaluation team reports for both offerors—which were “coded to ensure that the SSO made her decision without knowing the identity of any of the offerors.” *Product Team Response, Legal Brief*, ¶ 71 at 11; *see also id., Declaration of SSO*, Exhibit No. 3, ¶ 6 at 2. Thus, while the SET recommended Raytheon to the SSO for contract award as the evaluated best value offeror, they did not do identify Raytheon by name; instead, throughout the SSO Briefing and in the accompanying evaluation materials, the SET only identified Raytheon as “Offeror No. 2,” while Northrop was identified as “Offeror No. 3.” *Id., Declaration of James Pette*, ¶ 10 at 2.

72. The SSO reports that she reviewed all of the materials provided by the SET during the Briefing—including the four evaluation team reports that were individually prepared according to each RFO evaluation factor. *Id.*, Exhibit No. 3, ¶¶ 8-9 at 3. Following her review, the SSO “requested a meeting” with the contracting officer “and a member of the SET,” and asked them to provide:

more detailed information regarding the evaluation findings for Factor 1 – Technical of Offeror # 2 [Raytheon] and Offeror #3’s [Northrop] ability to meet performance requirements and to clarify the technical differences in each [o]fferor[‘s] probability in being able to achieve the 1,200 performance and supportability requirements.

Id., ¶ 10 at 3.

73. On July 25, 2006, the SET provided the SSO with a written “supplemental clarification” to its earlier Briefing which advised:

[DELETED].

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Id.

This submission further advised the SSO that:

Offeror # 3's [Northrop]s technical approach was mature with some development still required. Their design contained no performance margins and there was a lack of basis of detail [sic] of one of their radar model assumptions.

Id.

74. Based on the Supplemental Clarification, the SSO determined that the risk in Northrop's proposal "would eventually be realized and would result in actual performance below the requirements." *Id.*

75. Ultimately, the SSO reports that because Raytheon had received a "higher technical score of 79.5 as compared to [Northrop's] score of 73.5," and because Raytheon's [DELETED] it was her "judgment" that Raytheon's proposal provided the best value to the Government. *Id.*, ¶ 16. According to the SSO, she also found that Raytheon had submitted the best value offer because Northrop's "technical approach . . . still required some development" and because Northrop had proposed a "design [that] contained no performance margins." *Id.* In this regard, even though Northrop's evaluated price was lower, the SSO advises that she nevertheless concluded that:

[DELETED].

Id., ¶ 17 at 4-5.

76. In a Memorandum that was executed July 26, 2006, the SSO noted that based on her review of the evaluation record, she concurred with the SET's recommendation, and selected Raytheon for contract award. *Id.*, Exhibit No. 24.

77. On July 28, 2006, the Contracting Officer notified Northrop that Raytheon had been selected. *Id.*, Exhibit No. 26. On August 25, 2006, the Product Team

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provided Northrop with a debriefing; shortly thereafter, on September 1, 2006, Northrop timely filed this Protest.

78. Pursuant to the ODRA Procedural Regulations, the parties initially pursued alternative dispute resolution (“ADR”) efforts to resolve the Protest. However, on October 16, 2006, at the request of Northrop, the ODRA began default adjudication proceedings.

III. THE POSITIONS OF THE PARTIES

A. Northrop’s Protest

The gravamen of Northrop’s Protest is that the Product Team misevaluated and gave disparate treatment to the Northrop and Raytheon technical proposals to Northrop’s prejudice. As a preliminary matter, Northrop contends that its proposed radar system technical capabilities were improperly rated lower than Raytheon’s—even though Northrop allegedly “provided more detail than Raytheon with respect to the parameters” required by the RFO. *See Northrop’s Comments* at 8. For similar reasons, Northrop also challenges the Product Team’s evaluation of each offeror’s proposed delivery schedule. Although “Raytheon proposed a [DELETED] -month delivery schedule,” which is [DELETED] than the 24-month schedule specified in the RFO and proposed by Northrop,” Northrop contends that the evaluators inexplicably and “irrationally identified a weakness related to compression” because Northrop’s schedule was shorter. *See Northrop’s Comments* at 34. As further evidence that the Northrop and Raytheon technical proposals were treated unequally, the Northrop maintains that the FAA improperly applied two undisclosed evaluation criteria—which resulted in the unfair downgrading of Northrop’s proposal due to a perceived lack of “flexibility” and a missing “extended life cycle” variable in Northrop’s proposed system. *See Northrop’s Comments* at 41. Northrop also contends that each proposal’s technical risk was unequally evaluated. Finally, Northrop maintains that certain inconsistencies between the technical evaluation record and the content of the Northrop and Raytheon technical proposals confirm Northrop’s “allegations regarding a flawed underlying evaluation of

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proposals and a flawed” source selection decision.¹¹ *See Northrop’s Comments* at 51. But for these alleged evaluation errors, Northrop contends that its proposal would have received a higher technical score—an occurrence that would render its proposal technically equivalent or technically superior to Raytheon’s proposal.¹²

B. The Product Team’s Response

The Product Team maintains that its technical evaluation was reasonable and consistent with both the SIR and the FAA Acquisition Management System (“AMS”), and chides Northrop for offering nothing more than “mere disagreement” with evaluator judgment. *See Product Team Response, Legal Brief* at 18. In this regard, the Product Team warns that an “apples to apples comparison” between the Northrop and Raytheon Blake Charts should not be made in this case because the offerors’ “proposed design approaches were different,” *id.* at 58. Moreover, according to the Product Team, the evaluators actually “determined Northrop’s approach was appropriate based on its proposed” Blake Chart solution. *Id.*, at 58. The Product Team also maintains that its evaluations of the competing delivery schedules offered by Northrop and Raytheon were similarly unobjectionable, and that the reported weaknesses in Northrop’s technical approach were reasonably based on a “loss of schedule time” that was evident in Northrop’s proposed delivery schedule. *Id.* at 36. The Product Team further asserts that pursuant to various sections of the SOW, its evaluation of lifecycle support in the Northrop and Raytheon proposals was required and otherwise reasonable, *see id.* at 41, and that its judgments about design flexibility were reasonably encompassed and contemplated by the SIR’s required risk analysis. *Id.* at 41.

Especially given the nature of this requirement, the Product Team emphasizes that it “was not unreasonable for the Technical evaluation team to have made an assessment of the

¹¹ Initially, Northrop’s Protest also challenged the Product Team’s evaluation of the Solid State Polarizer option in each proposal; however, this allegation was withdrawn. *See Protester’s Comments* at 4.

¹² Northrop’s Protest was supplemented by three separate filings on September 22, 2006; October 4, 2006; and October 27, 2006. These submissions were based on evaluation details provided in several documents that were produced by the Product Team during the ODRA’s alternative dispute resolution (“ADR”) process and are part of the administrative record. The supplemental filings essentially amplify the technical evaluation challenges already announced in Northrop’s initial September 1, 2006 filing.

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existence and quality of a feature”—[DELETED]—and of how well it would work in its practical application. *Id.* at 42. The Product Team similarly explains that the “evaluation of risk likelihood and consequence was based on each offeror’s proposed technical approach for meeting the SIR[’s] stated requirements,” *id.* at 48, and reports that the “evaluator’s worksheets and the Technical team report provide ample evidence that the findings of risks for both Raytheon and Northrop” complied with the “factors and criteria” set forth in the RFO. *Id.* at 49. In particular, the Product Team emphasizes that the higher risk rating assessed for Northrop’s technical approach reasonably resulted from Northrop’s “very rigid design that incorporates [DELETED] aspects of their approach.” *Id.* at 54.

As a final matter, the Product team also disagrees with Northrop’s contention that the record fails to support the evaluated technical findings for each proposal, and suggests that a “review [of] the extensive documentation” in this record will “demonstrate the extraordinary lengths to which” the Product Team “went to ensure a sound, reasoned and . . . qualitative analysis” for this competition and selection decision. *Id.* at 60. To that end, the Product Team has provided the ODRA and the parties with a comprehensive, well-documented record in support of the challenged proposal evaluation and source selection decision which is comprised of: the Northrop and Raytheon proposals; the Procurement Plan; all SIR documents and related clarification requests and responses; all evaluator worksheets; all source selection documents—including the SSO Briefing Package, Source Evaluation Team Report, individual Evaluation Team reports, the SSO’s Selection Decision Memorandum, and Sworn Declarations from the SSO, each Technical Chairman, the Program Manager; correspondence from DOD and DHS; and even the Contracting Officer’s Price Validity Discussion notes. In addition to these documents, both Northrop and Raytheon have each supplemented their technical arguments with Declarations executed by separately retained Technical Consultants.

C. The Intervenor’s Position

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Pursuant to the ODRA's Procedural Regulations, Raytheon intervened in this matter on September 8, 2006.¹³ In addition to defending the Product Team's evaluation and source selection decision as "thorough, reasonable, well-documented, and consistent" with the RFO's terms, Raytheon maintains that Northrop's Protest "does not offer a basis to disturb the award decision" because its objections only present "differences of opinion or interpretation" with the Product Team's judgments. *See Raytheon Comments* at 3. According to Raytheon, the "Proposal Instructions" and the "Evaluation Scheme" in the RFO expressly warned that the Product Team "would evaluate *information submitted by the offeror* against" the four evaluation factors specified therein—which expressly included an evaluation of Blake Chart Analyses and "risk." *Id.* at 8. Since the solicitation clearly "required proposals that were specific enough to judge . . . technical . . . ability," and since Northrop did not submit the requested details, Raytheon contends that Northrop cannot reasonably take issue with the its lower technical score.

IV. DISCUSSION

It is well established that the FAA is required to evaluate proposals and make contract award consistent with the evaluation criteria set forth in the Solicitation. *See AMS* § 3.2.2.3.1.2.3; § 3.2.2.3.1.2.5; and § 3.2.2.3.1.3; *see also Protest of Crown Consulting, Inc.*, 01-ODRA-00181. Consistent with that requirement, and pursuant to its Procedural Regulations, 14 C.F.R. Part 17, the ODRA will not recommend, in a bid protest context, that the Administrator overturn Agency actions that have a rational basis, are neither arbitrary nor capricious, nor an abuse of discretion—and are supported by substantial evidence. *See Protest of Jones Grading & Excavation, Inc.*, 02-ODRA-00229 (*and cases cited therein.*) Where substantial evidence in the record shows that an FAA Product Team in a "best value" procurement made its source selection decision in consonance

¹³ In its initial Protest, Northrop requested that the ODRA direct the Product Team to suspend Raytheon's contract performance for the duration of the Protest. In separate filings that were submitted September 11, 2006, Raytheon and the Product Team each opposed the suspension request—and in a decision that was issued September 14, 2006, the ODRA agreed, finding that the Protester's claim of potential competitive disadvantage did not establish the likelihood of irreparable injury, hardship or public interest necessary to prevail on such a request. *See Protest of Northrop Grumman Systems Corporation*, 06-ODRA-00384, *Decision on Protester's Request for Suspension*, dated September 14, 2006.

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with the AMS and the solicitation's specified evaluation and award criteria, the ODRA will not substitute its judgment for that of the Product Team. *Id.*

In this case, the ODRA finds that the record provides clear and substantial evidence supporting the evaluated strengths and weaknesses in each offeror's technical proposal, and concludes that despite Northrop's allegations to the contrary, the evaluation and selection of Raytheon was consistent with the RFO's evaluation criteria, rationally based, and not arbitrary or capricious. Based on its review, the ODRA concludes that the Product Team conducted a model competition, evaluation and source selection process.

A. Evaluation of the Blake Chart Analyses

In challenging this aspect of the Product Team's technical evaluation, Northrop initially contends that "the RFO did not require offerors to provide all of the data backing up all of their Blake Chart analyses so that the FAA could replicate the analyses," and consequently "[i]t was patently unreasonable for the FAA to penalize Northrop Grumman for allegedly failing . . . to provide every iota of data" in its proposal because the "RFO merely required . . . detailed visibility into how the factors used in the radar modeling are derived." *Id.* at 8 (quoting SOW § 3.2.1 at C-29). In making this argument, Northrop contends that the SOW's use of the term "contractor" instead of "offeror" throughout the SOW's specified radar performance parameters means a pre-award demonstration and evaluation was not mandatory. Alternatively, Northrop insists that the Blake Chart "data and explanations provided . . . in its proposal . . . were sufficient for a person skilled in radar analysis to replicate the Blake Chart numbers," *see Protest dated October 4, 2006* at 7, and that the Product Team's contrary evaluation conclusions are unreasonable. In support of this position, Northrop has submitted a "Declaration" from its technical consultant ("Northrop Consultant") who reports that after reviewing the data offered in both the Northrop and Raytheon Technical Volumes, he successfully "was able to replicate both offerors' Blake Chart analyses." *See Declaration of William A. Skillman* dated November 17, 2006, ¶ 7(a) at 2.

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As a preliminary matter, the ODRA does not accept Northrop's meritless contention that the RFO did not require offerors to demonstrate compliance with the SOW's specified radar baseline performance parameters. In this case, the RFO clearly and expressly stated that a "fully compliant offer must address all 'SHALL' and 'MUST' requirements set forth in the SOW"—a section of the RFO which clearly includes the approximately thirty pertinent radar performance parameters housed therein. *See Finding of Fact No. 31, supra.* These instructions are similar to, and otherwise consistent with the other technical directives that appear throughout the RFO. *See Finding Nos. 23-24, supra.*

In this regard, as indicated above, the RFO expressly required each that each proposed technical LRR solution demonstrate compliance with the SOW's "Baseline Performance Parameters" using the "radar modeling in the form of a Blake Radar Range Altitude Performance Model" ("Blake Model"). *See Finding No. 28.* Moreover, the Product Team's April 14, 2006 "Required Clarifications" expressly asked Northrop to provide "more detail/information/computations . . . for each parameter in the Blake analysis" so that the Product Team "can reproduce the exact values" for a list of "items" that were detailed therein. *Id.* at 2. These "Required Clarifications" clearly identified "April 24, 2006, 4:00 p.m." as the deadline for submitting this requested technical information—and Northrop was specifically instructed by the Clarifications to "respond individually to each point (by number), and to submit all associated modifications . . . in revision markup mode." One of the Clarification's enumerated technical points also expressly advised Northrop that within its submitted Technical Volume, "[t]here are instances where exceptions appear to be taken to the requirements of the SOW," and further warned that "[a] fully compliant offer must address and meet all 'SHALL' or 'MUST' requirements." *See Product Team Report, Exhibit No. 11 at 3.*

Under these directives and circumstances, the RFO's use of the identifier "contractor" instead of "offeror" is not dispositive of when the Blake Chart Analyses and other technical details were required to be submitted. The plain words of the above-referenced RFO provisions and the April 14, 2006 "Required Clarifications" clearly and unequivocally advised that Northrop needed to supplement and submit fully detailed Blake Chart Analyses to the Product Team by the April 24, 2006 deadline identified in

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the April Clarifications. Northrop's contrary interpretation—that the reference to “contractor” meant this information could be submitted during post-award contract meetings with the Product Team—could only succeed if the term “contractor” were viewed separately from its surrounding terms and provisions in the RFO. In this regard, it is well established that a solicitation must be read in a manner which gives full effect to all its terms and phrases. Under these circumstances, the ODRA concludes that the RFO's use of the identifier “contractor” instead of “offeror” in no way nullified the clearly stated directive in the RFO and April Clarification to submit complete and detailed Blake Chart Analyses by the specified Technical Volume deadline.

Alternatively, Northrop contends that the basis for its lower technical score is not supported by the record because Northrop's submitted proposal set forth sufficient detail from which the Product Team could ascertain the basis for its Blake Chart values. In fact, Northrop maintains that it actually “provided more detail with respect to the parameters used in its Blake Chart analysis than did Raytheon.” *Northrop's Comments* at 10. In advancing this argument, Northrop suggests that the Product Team could have verified the feasibility of its Blake Chart Analyses “by plugging [its] baseline parameters into a Blake Chart computer program” which would enable the Product Team to estimate each “proposed systems’ maximum range performance.” *See Northrop's Comments* at 9. Northrop also alleges disparate treatment of the offerors under this evaluation category, claiming that the Product Team inexplicably required Northrop to produce parameter details that were otherwise lacking in Raytheon's proposed solution.

The record does not support these contentions. First, as noted above, even though the RFO clearly specified that offerors would be evaluated for the responsiveness of their Technical Volume, *see Finding of Fact No. 23, supra*, the record shows that for the most part, Northrop did not respond to the Product Team's request for clarification of Northrop's various propose LRR SLEP features. For example, while the Product Team confirms that Northrop “submitted a revised Blake Chart analysis which accounted for the atmospheric phenomenon causing signal loss,” other Blake Chart values offered in Northrop's Technical Volume were “missing detail.” *See Product Team Response, Legal Brief* at 23. In addition, Northrop “failed to indicate as a part of [its] analysis which

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parameters were relevant and which were not.” *Id.* at 25. The SET Chairman confirms that Northrop’s “incomplete response to the TET’s clarification request was cause for concern” because the “lack of detail regarding the Blake Model parameters” suggested “the possibility of other losses that were unaccounted for;” moreover, the “weakness relating to a lack of detail” suggested the “possibility that the performance requirements may not be met due to . . . inaccurate assumptions in the Northrop Grumman radar model.” *See Declaration of John Farr*, ¶ 53 at 8.

The ODRA’s review of the Northrop and Raytheon Technical Volumes confirms the Product Team’s position that Raytheon’s submission was far more detailed. While Northrop’s Technical Volume is replete with tables of “Detection Performance” values that correspond to such Blake Chart Model variables as: Transmit Power; Pulse Width; Visibility Factor; Noise Figure; and Atmospheric Loss, *see Product Team Response, Appendix A, Excerpts of Northrop Grumman’s Revised Proposal* at 125, there are no supporting computations offered in Northrop’s Technical Volume. Instead, the Northrop proposal only reiterates textbook “definitions and descriptions” of “Blake Chart detection performance parameters;” for example, advising that the “Visibility factor is the signal-to-noise required to detect a target.” *Id.* at 128. Tables of “Transmit Loss,” “Receive Loss,” and “Noise Figure” values are also provided and similarly unsubstantiated. *Id.* at 130-131. In short, while many Blake Chart values are identified in the Northrop Technical Volume, there are generally no accompanying computations or descriptive analysis.

In contrast, the record confirms that Raytheon’s Technical Volume “provided considerably more detail” as it identifies [DELETED]. *See Declaration of John Farr*, ¶ 55 at 8; *see also Product Team Response, Appendix B, Excerpts from Raytheon’s Revised LRR SLEP Technical Proposal. See generally, Raytheon Technical Volume I, Book 2, Technical Solution* at 213 *et seq.* For example, with respect to its “Visibility Factor Analysis,” Raytheon’s technical solution specifies that a [DELETED] integration and [DELETED] the underpinning of its proposed Visibility Factor value, *see Raytheon Revised Volume* at 467-474, and its Technical Volume also sets forth a similarly detailed “Visibility Factor Calculation.” *Id.* at 310-311.

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While Northrop offers a point-by-point comparison of the various losses identified in its Technical Volume with those outlined—or omitted—in Raytheon’s Technical Volume to demonstrate the sufficiency of its proposed LRR SLEP technical solution, the ODRA finds this analysis unpersuasive because different technical solutions require or emphasize different technical variables. For example, Northrop’s Consultant confirms that the “noise figure and receive losses are not directly comparable between the two systems” proposed by Northrop and Raytheon, and further advises that “there are various other methods that could be used to calculate” each offeror’s proposed visibility factor. *See Declaration of William A. Skillman*, ¶ 7(a)(iii) at 3 and ¶ 7(a)(vi) at 4. The Technical Evaluation Team’s Chairperson similarly confirms that there “are many variables that affect [the LRR] parameters,” and advises that “the methods for producing transmit power and increasing the performance of a radar receiver vary.” *See Declaration of John Farr*, ¶ 15 at 2. As a result, because of the variety of design options, each offeror’s proposed LRR “design requires a unique, comprehensive analysis in order to predict the overall radar performance.” *Id.*, ¶ 16 at 2. Thus, the presence or absence of a particular parameter—*e.g.*, a “loss,” a “gain” or certain transmitter power—in a proposed technical solution does not suggest any reasonable basis for alleging a disparate treatment of proposals by the Product Team.

The record shows that even without a specific reference, the Product Team was nevertheless able to determine some of the missing values in Raytheon’s proposed technical solution because of an abundance of proposal detail. The TET Chairperson reports that “[a]fter examination, it became evident that Raytheon had neglected to include [DELETED].” *Declaration of John Farr*, ¶ 73 at 11. However, because Raytheon had provided [DELETED] the TET was able to use [DELETED] successfully calculate and establish the value for an omitted [DELETED]. *Id.* at 12.

In its Protest, Northrop claims that this analysis evidences the Product Team’s favoritism towards Raytheon. However, the record shows that even though the results were not as favorable, Northrop’s proposal similarly received additional evaluation attention from the Product Team. Specifically, when the Product Team found that it “could not determine

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whether Northrop [had] accounted for all relevant” parameters in its revised proposal,” *see Legal Brief* at 24, the evaluators attempted their own “exhaustive efforts [to] analyz[e] Northrop’s Blake Chart analysis” by “using the textbook” referenced in Northrop’s proposal, Raymond S. Berkowitz’s *Modern Radar: Analysis, Evaluation and System Design*), to calculate and determine the missing variables. *Id.*

Despite the clear RFO instructions and the April 14, 2006 Clarification request, the record shows that Northrop inexplicably failed to provide the detail requested by the Program Office for its Blake Chart Analysis. *See Findings of Fact Nos. 54-57, supra.* Although Northrop’s Consultant has explained that he nevertheless “was able” to calculate the required Blake Chart values for each offeror’s submitted proposal using his proprietary computer software program, the ODRA does not find this representation persuasive. As an initial matter, the Consultant’s Declaration confirms that elements of Northrop’s proposal submission were unreliable; for example, the Consultant advises that Northrop, “in calculating its receiver losses, had apparently double-counted” other losses associated with one of its LRR design components. *Declaration of William A. Skillman* at 3. Moreover, the Consultant’s success in producing the variables that were sought by the Product Team for its review of the reported Blake Chart Analyses values was made possible by the use of the Consultant’s proprietary computer software program. *Id.* at 4.

Under these circumstances, the record simply does not support Northrop’s contention that this aspect of the technical evaluation was unreasonable and demonstrated favoritism. The ODRA’s review of the Northrop and Raytheon proposals confirms that the evaluated concerns and findings were reasonably based on the information presented therein. In this regard, although Northrop contends that a computer program could have been used by the Product Team to verify the feasibility of its unsupported or omitted Blake Chart Analyses parameters, the RFO expressly tasked the offerors with the burden of demonstrating their technical understanding and proving the feasibility of their proposed LRR design. *See Findings of Fact Nos. 23-24, supra.* Notwithstanding these clear instructions, Northrop provided little detail about its claimed Blake Chart Analyses—and instead advised the Product Team that it would demonstrate technical capability post-award. *See Finding of Fact No. 53, supra.* Given its failure to respond to the RFO’s

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instructions, and the Product Team's clear Clarification Request for Blake Chart Analysis data and detail, Northrop cannot now reasonably argue that the burden to attempt to independently determine or verify the rationale for Northrop's proposed LRR performance parameters was on the Product Team. *See International Outsourcing Services, LLC v. United States*, 69 Fed. Cl. 40 (2005).

In this regard, it is well established that the protest adjudication process was not intended to permit an unsuccessful offeror such as Northrop to abdicate and defer its proposal submission responsibilities with the expectation of pursuing a "second bite at the apple" during subsequent litigation at any of the federal procurement forums, including the ODRA. *See Ryan Co. v. United States*, 43 Fed. Cl. 646 (1999). To that end, it is axiomatic that a Protester must demonstrate prejudice for any protest against a federal procurement to be sustained. *See Protest of DMS*, 04-ODRA-00005. In order to prevail in a protest, the protester must show not only a significant error in the underlying procurement process, but also that the identified error prejudiced its competitive position. *See Candle Corp. v. U.S.*, 40 Fed. Cl. 658 (1998). This requires the Protester to affirmatively prove that, but for the federal agency's statutory or regulatory violation or procurement error, there was a reasonable likelihood that the protester would have received the contract award. *Id.*

Consistent with this burden of proof, the ODRA and the other federal protest forums have long recognized that the failure of an offeror to furnish descriptive information in response to a specific agency request may constitute a reasonable basis for a contracting agency to exclude an offeror from further consideration for award. *See International Outsourcing Services, LLC v. United States*, 69 Fed. Cl. 40 (2005) (and cases cited therein). Thus, where the record shows that a Protester initially "chose to take issue with, ignore, or respond in an inappropriate or uninformative way" to a specific proposal request or requirement during a best value procurement, the ODRA has refused to find competitive prejudice. *See Consolidated Protests of Consecutive Weather, Eye Weather, Windsor Enterprises and IBEX Group, Inc.*, ODRA Docket Nos. 02-ODRA-00250 – 00254.

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In this case, by choosing to ignore the RFO's and the Clarification's specific instructions concerning the importance of providing detailed computations to support its proffered Blake Chart Analyses, Northrop assumed the risk that the Product Team evaluators would not find sufficient details to adequately evaluate the feasibility of Northrop's technical approach. Given the circumstances of this procurement, and Northrop's failure to fully respond to the RFO and the Product Team's express requests for more supporting analyses, the ODRA concludes that Northrop has failed to demonstrate how the Product Team's technical evaluation of the Blake Chart Analyses was improper or otherwise prejudiced its competitive position. In the final analysis, Northrop, and not the Product Team, was responsible for clearly and fully responding to the solicitation's express information requirements and to the Product Team's Request for Clarification of its technical proposal. Northrop did not meet its responsibility in this case and cannot now shift the burden of its failure to the Product Team. Accordingly, the ODRA finds that the Product Team reasonably assigned Northrop's proposal with a lower technical score than Raytheon. *See Bean Stuyvesant, LLC v. United States*, 48 Fed. Cl. 303 (2000).

B. Evaluation of Northrop's Proposed Delivery Schedule

Northrop also contends that its proposed 24-month Master Integrated Program Schedule ("MIPS") was unreasonably evaluated as presenting a "compressed testing and delivery weakness" because the 24-month timeframe Northrop specified was required by the RFO. Northrop also challenges the Product Team's evaluation of Raytheon's proposed [DELETED] schedule, claiming that Raytheon's longer timeframe impermissibly exceeded the RFO's specified 24-months, and contending that as a result, Raytheon should have been penalized with a lower technical score.

Schedule Planning and Control was one of four elements of the Program Management Plan ("PMP") that the RFO specified would be evaluated pursuant to the Technical Factor. *See Findings of Fact Nos. 23-25, supra*. The record also confirms that Section F.6 of the RFO established "Delivery Schedules" for each supply or service contract line item number ("CLIN") specified in the RFO, *see RFO, Section F* at F-1, the majority of

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which specified a “Delivery” timetable of “24 Months After Contract Award” or “Not Later Than 24 Months After Contract Award.” *Id.* at F-3, F-4 and F-7.

To the extent Northrop argues that the Product Team improperly waived the RFO’s Master Integrated Program Schedule (“MIPS”) requirement for Raytheon, the ODRA already has ruled on that issue. In an earlier decision granting Raytheon’s prior Motion to Dismiss Northrop’s MIPS protest ground, the ODRA explained that the clear terms of this RFO did not mandate a 24-month schedule—and instead permitted offerors to propose schedules of shorter or longer duration. *See Protest of Northrop Grumman Systems Corporation*, 06-ODRA-00384, *Decision on Motion for Partial Dismissal and Limitation on Discovery* dated September 22, 2006.¹⁴

The record shows that ultimately the Product Team concluded that Northrop’s proposed schedule presented a risk of “time loss” because it failed to specify adequate time for the required LRR design and system testing, and otherwise allowed “little room for error or risk mitigation” in the event that LRR design changes were required. *Id.* at 36. Notwithstanding these evaluated concerns, however, the record shows that Northrop’s proposed 24-month schedule was ranked slightly higher—[DELETED] out of 9 available points—than Raytheon’s schedule—which received [DELETED] out of 9 points.

Notwithstanding the absence of a “[DELETED]-month” reference in the contemporaneous evaluation documents, the ODRA nevertheless finds Northrop’s challenge to this aspect of the technical evaluation to be without merit. As a preliminary matter, several contemporaneous evaluator worksheets clearly emphasize that Raytheon proposed a delivery schedule that substantively differed from that specified in Section F.6 of the RFO; for example, one technical evaluator reports that “Raytheon does not meet the government schedule” set forth in the RFO but nevertheless concluded that Raytheon’s “provided” schedule was “the most believable of the three vendors.” *See*

¹⁴ In addition to the clearly stated terms in the RFO, the record also shows that Northrop should have understood the flexible nature of the identified 24-month schedule timeframe because, in response to its earlier questions about the SIR, the Product Team “expressly indicated that the dates provided” in Section F’s Delivery Schedules were “examples only.” *See Product Team Response, Legal Brief* at 35 (citing *Product Team’s Response* to Northrop’s SIR Question Nos. 45 and 58, dated February 24, 2006).

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LRR SLEP Evaluation Risk Scoresheet of Evaluator No. 11, ¶ 5 at 1. Another technical evaluator also observes “delay” in Raytheon’s proposed schedule when “compared to the government furnished schedule” in the RFO, but nevertheless determines that Raytheon’s “schedule is realistic.” See *LRR SLEP Evaluation Risk Scoresheet of Evaluator No. 12*, ¶ “Risk” at 2. According to a third technical evaluator, Northrop’s proposed schedule “misses the Gov’t timeline by [DELETED].” See *Evaluation No. 1, LRR SLEP Evaluation Risk Score Sheet*, ¶ 4 at 1. Finally, one technical evaluator reports that Raytheon “has proven [its] schedule with [DELETED],” See *Evaluator No. 6*, while another downplayed schedule concerns by advising that Raytheon “only misses” the schedule [DELETED].”

While there is much in the record to recommend Raytheon’s proposed schedule, there are notable criticisms; because the schedule is “only given in high terms,” one evaluator suggested there were a “number of problems” in Raytheon’s schedule. Another evaluator cautioned that he didn’t “believe [Raytheon] can meet the schedule” with its “current design,” and yet another evaluator explained that “while there is little risk” of Raytheon “eventually being able to meet the specifications, there is some risk to the schedule.” Finally, another evaluator simply indicated that “schedule risk” would be “driven” by Raytheon’s “resources.”

On balance, the contemporaneous notes clearly indicate that the pros and cons in Raytheon’s proposed schedule were considered and evaluated. The subsequent point score of [DELETED] points out of an available 9 appears to be a reasonable reflection of the mixed evaluator conclusions. Notably, other cognizant procurement officials also have substantiated the Product Team’s contemporaneous observations and evaluations pertaining to Raytheon’s longer [DELETED]-month timetable. For example, in a Declaration submitted as part of the Product Team Response, one member of the Source Evaluation Team reports that:

Northrop Grumman proposed a 24 month delivery schedule . . . while Raytheon proposed a [DELETED] month delivery schedule. The SET did not view the [DELETED] difference between the two offerors['] proposed delivery

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schedule as significant given the complexity of the work to be done.”

See Declaration of James Pette, ¶ 8 at 2.

The Contracting Officer for this procurement similarly advises that:

the members of the SET discussed the proposed schedules of both offerors, and determined that both were compliant with the instructions of the RFO. The SET also determined that [DELETED] difference, in itself, did not represent a significant difference between the offerors, was not discriminating, and was not found to be a matter for consideration in the development of a recommendation for the best value offeror.

See Declaration of Gavin Byrne, ¶ 25 at 7.

These contemporaneous documents and Declarations clearly establish substantial reliable evidence from which to conclude that Raytheon’s longer [DELETED] schedule was reasonably evaluated, assessed for weaknesses and risk, determined to be technically acceptable—and [DELETED] lower than Northrop’s proposed schedule in technical merit. Under these circumstances, there is simply no basis in the record to suggest that the Product Team’s evaluation of each offeror’s schedule lacked a rational basis, or was otherwise arbitrary, capricious or an abuse of discretion.

It should be noted that Northrop’s proposed schedule was not downgraded because of its 24-month duration—but instead was criticized and awarded a somewhat lower score because its schedule failed to explain how its proposed technical solution could be successfully and realistically accomplished within the specified 24 months. One evaluated scheduling concern was Northrop’s proposal to continue performing activities through Thanksgiving and Christmas, *see Evaluator No. 2*, while another arose from the lack of specificity in its schedule. Specifically, the record shows that Northrop’s 24-month schedule was evaluated as being “overly optimistic” as well as unrealistic; for example, the evaluators noted that the “one month allotted between site survey and start of installation . . . seems insufficient for the design . . . reviews . . . comments, and approvals to take place. *See Evaluator No. 2; Evaluator No. 13* In addition, the time

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scheduled by Northrop “to prepare the specific installation plans and gain concurrence of all the parties and approval . . . will undoubtedly take longer than a month,” and an evaluator was concerned that Northrop’s proposed activities would result in a four-month late delivery. *See Evaluator No. 7*. Finally, several evaluators concluded that Northrop’s “schedule is very compressed” and that “there is a significant to high level of risk associated with missing dates in the schedule. *See Evaluator 12; Evaluator 14; Evaluator 17; Evaluator 18*. Even with the evaluator’s well documented concerns that Northrop may have unrealistically clustered the events in its proposed technical approach too tightly, the record shows that Northrop [DELETED] than Raytheon for this aspect of its proposal. Under these circumstances, where the record otherwise supports the evaluations of both the Northrop and Raytheon Technical Volumes, there is simply no basis for objecting to this aspect of the technical evaluation.

C. Alleged Undisclosed Evaluation Criteria

Northrop also alleges that the Product Team improperly used two unstated evaluation factors in its technical evaluation. According to Northrop, the Product Team improperly assigned a weakness to the risk mitigation approach in Northrop’s Technical Volume due to a lack of “design flexibility” that was not specified as an evaluation factor in the RFO. Northrop also maintains that its Technical Volume was downgraded pursuant to an “extended life cycle” criterion that was not identified in the RFO.

The record shows that this aspect of the Product Team’s technical evaluation was critical in distinguishing between the Northrop and Raytheon proposals’ technical merit. Whereas Northrop’s design was based on [DELETED] Raytheon’s technical solution utilized a digital [DELETED]—which included a [DELETED] that the Product Team concluded could [DELETED] more easily than Northrop’s [DELETED]. *Product Team Response, Legal Brief*, at 42. As a result of its reliance on the identified [DELETED] the Product Team concluded that Raytheon’s solution was able to offer [DELETED] for its proposed performance—and subsequently rated Raytheon’s technical approach more highly than Northrop’s because of its lowered technical risk. For example, in response to questions by the SSO, the SET explained:

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The same [DELETED] that help during development also were helpful during the lifecycle to support radar modifications that become necessary to achieve the required lifecycle. Often a modification becomes necessary due to obsolete components that become financially or materially unavailable. Additionally, some errors in design are only uncovered after deployment has already begun.

Product Team Response, Exhibit No. 23, Supplemental Clarification to the Evaluation Report for Factor 1, Technical at 4.

In “best value” procurements, the FAA Product Teams must make source selection decisions in consonance with the AMS and specified Solicitation evaluation and award criteria. *See Protest of Jones Grading & Excavating, Inc.*, 02-ODRA-00229. However, it is also well established that in performing an evaluation, the procuring agency may take into account specific, albeit not expressly identified matters that are logically encompassed by the stated evaluation criteria. *See Protest of Information Systems & Networks Corp.*, 99-ODRA-00116 at 7-8.

In this case, as indicated above, the RFO contained multiple provisions which clearly advised that the risk in each offeror’s proposed technical solution would be evaluated. *See Findings of Fact Nos. 35-37, supra.* In particular, “Risk Likelihood”—the probability that an identified “situation or circumstance would impact achieving program objectives—along with “Risk Consequence—the degree to which an identified risk would negatively impact technical performance and schedule—were of paramount consideration. *See Finding of Fact No. 33, supra.*

While admitting that “[t]here was no requirement for design flexibility per se,” the Product Team advises that this feature was reasonably encompassed by the RFO’s clear emphasis on evaluating each of the technical solution risks referenced therein because “the lack of design flexibility can impair the ability to mitigate certain types of risks.” *Product Team Response, Legal Brief at 41.* That is, while Raytheon’s [DELETED] flexibility lessened the evaluator’s risk concerns, Northrop’s reliance on [DELETED] translated to a higher degree of risk because of its inflexible characteristics. Similarly, because “this acquisition . . . is for extending the service life of the ARSR-1, ARSR-2 and AN/FPS-20/60” radar systems, the Product Team maintains that Northrop had to be

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“reasonably on notice that the evaluation would take into consideration lifecycle considerations” given their relevance to evaluating the success of a proposed technical solution. *Id.* Moreover, and as confirmed by Northrop in its Comments, the clear “purpose of the procurement was to obtain design modifications that would extend the service life of the LRR systems to at least 2025, as stated in the RFO.” *Northrop’s Comments* at 43. Under these circumstances, the ODRA agrees that considering the design flexibility and extended life cycle of each offeror’s approach was intrinsic and reasonably related to the RFO’s risk evaluation factors and the overall objectives of the procurement. Consequently, the Product Team’s consideration of these features during its evaluation of each offeror’s proposed technical solution did not constitute the use of unstated evaluation criteria.

D. Allegations of Disparate Treatment

Northrop next contends that the Product Team generally did not evaluate each offeror’s Technical Volume on an equal basis, and claims that the rationale underlying the evaluated differences between each offeror’s technical approach was not reported to the SET or SSO. According to Northrop, while certain risks and weaknesses were identified and downgraded in its proposed technical solution, similar or more egregious defects in Raytheon’s proposed technical approach were inexplicably given the “benefit of the doubt” and not downgraded or reported to the SSO.

Northrop’s primary basis for this challenge arises from its belief that the evaluated proposal deficiencies noted in Northrop’s “more mature” design were overemphasized and unreasonably penalized even though Northrop claims they were “far less significant than the risks associated with Raytheon’s immature system.” *Northrop’s Comments* at 47. In contrast to Raytheon’s proposed [DELETED] and were identified as requiring [DELETED]—Northrop reports that its proposed technical solution using a mature design “requires significantly less development” than Raytheon’s proposed solution. Northrop also maintains that the identified risks in its proposed technical solution were not as egregious as those identified in Raytheon’s technical approach—and consequently,

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Northrop's proposed solution should have received a higher technical score than Raytheon's approach.

The record does not support Northrop's contention. As a preliminary matter, the contemporaneous notes prepared by the eighteen technical evaluators during the course of their review and scoring of the Northrop and Raytheon Technical Volumes reveal a reasoned, well documented analysis of each proposal that clearly identifies both strengths and weaknesses. Overall, the record shows that Northrop's Technical Volume was credited for certain proposal strengths such as its mature design, *see Evaluator No. 6* at 1 and 12, and its general system description (excluding the CD-2 option). *See Evaluator No. 18* at 1. At the same time, however, the worksheets also show that the majority of the evaluators concluded that Northrop's proposal failed to provide "all the details necessary to adequately evaluate ALL aspects of" its technical solution, and that they were frustrated in their evaluation efforts by Northrop's promise to furnish additional details after contract award. *See Product Team Response, Tab No. 14, Binder Nos. 1 and 2, Evaluator No. 1* at 1; *Evaluator No. 2* at 5; *Evaluator No. 4* at 1; *Evaluator No. 7* at 9; *Evaluator No. 8* at 1; *Evaluator No. 9* at 1 and 4; *Evaluator No. 11* at 1; *Evaluator No. 13* at 1; *Evaluator No. 15* at 8; and *Evaluator No. 17* at 5. In addition, the evaluator worksheets show that the team was concerned that Northrop's [DELETED] had not been demonstrated. *See Evaluator No. 5* at 1; *Evaluator No. 6* at 1 and 7. Finally, Northrop's submitted Blake Chart Analyses were also criticized for being unrealistic and inadequate. *See Evaluator No. 7* at 2; *Evaluator No. 3* at 3; *Evaluator No. 8* at 3; *Evaluator No. 8* at 1 and 3; *Evaluator No. 9* at 6-7; *Evaluator No. 12* at 2 and 5.; *Evaluator No. 13* at 3 and *Evaluator No. 14* at 1. Several other technical aspects of Northrop's proposed approach were criticized; for example, the record shows that Northrop's proposal was downgraded because "no heat mitigation analysis" was provided. *See Evaluator No. 10* at 9; *Evaluator No. 14* at 5; *Evaluator No. 17* at 3; and *Evaluator No. 18* at 3,10-11.

In contrast, Raytheon's proposed technical solution was largely praised for exceeding the technical requirements and for providing a significant amount of data on its technical design. *see Evaluator No. 1* at 1; *Evaluator No. 7* at 1.; *Evaluator No. 8* at 3. *Evaluator No. 12* at 1. Unlike Northrop, the Raytheon technical solution was given high marks for

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the extensive data and design provided in its Blake Chart Analyses. *See Evaluator No. 3* at 4; *Evaluator No. 4* at 3; *Evaluator No. 5* at 3; *Evaluator No. 8* at 3; *Evaluator No. 9* at 3; and *Evaluator No. 11* at 1. Although the worksheets also report some concerns about the feasibility of Raytheon's schedule, *see Evaluator No. 6* at 1, a proposed [DELETED] in its technical design, and its [DELETED], *see Evaluator No. 5* at 1 and *Evaluator No. 11* at 1, the bulk of the reported evaluation remarks emphasize and refer to the various strengths in Raytheon's proposed technical solution.

In summary, the contemporaneous technical evaluation record prepared by the eighteen evaluators is replete with detailed descriptions of the identified technical strengths and weaknesses in both the Northrop and the Raytheon proposed LRR designs. The Technical Evaluation Team Report and the Source Evaluation Team Report reflect these findings. The TET Report summarizes and succinctly presents the findings set forth in the eighteen evaluation worksheets by categories of "strengths," "weaknesses," and "risks," and the ODRA's review shows that the identified findings accurately reflect the concerns recorded in the contemporaneous record. The SET Report similarly captures and summarizes the worksheets and TET Report—and, consistent with the underlying evaluation record, emphasizes that the Northrop "proposal had a general lack of detail" and further advising that Raytheon's "technical solution presented the highest probability of meeting mission and supportability lifecycle requirements." *See SET* at 8.

The well-articulated evaluation record discussed above does not substantiate Northrop's allegation of disparate treatment or evaluation by the Product Team because, as evidenced by the well-documented rationale in the record, the technical evaluators reasonably concluded that even with its mature component, the undeveloped elements of Northrop's technical design presented performance risks that reasonably translated to a lower technical score. Under these circumstances, where the record clearly sets forth a well-substantiated rationale for the identified technical concerns, Northrop's objection to the Product Team's evaluation conclusions and ratings amounts to nothing more than mere disagreement—which is not sufficient to overturn the Product Team's evaluation or establish disparate treatment. *See Protest of Global Systems Technologies, Inc.*, 04-ODRA-00307 (and cases cited therein).

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E. The Adequacy of the Source Selection Record

As a final matter, Northrop contends that the source selection decision was improper because it was allegedly based on a flawed underlying evaluation of proposals and a flawed SET Recommendation. First, Northrop contends that the SSO decision was improperly based on a scoring methodology that improperly combined each offeror's technical points with its awarded past performance points, in contravention of the RFO. In addition, Northrop challenges the selection decision because the SET that was provided to the SSO did not recount each of the evaluated risks and weaknesses reported in the TET report.

The RFO specified that each technical proposal was worth 95% of the overall score, and that the past performance evaluation rating would comprise 5% of the overall score. There was no prohibition in the RFO against combining these two evaluation totals—and the ODRA fails to see how this mathematical computation prejudiced Northrop.

To the extent Northrop alleges disparities between the SET and the TET reports, as noted above, the ODRA's review found these two documents to be consistent. In any event, the record shows that the Source Evaluation Team actually provided the SSO with the underlying evaluation reports that were performed for each RFO factor—including the TET Report. According to her Declaration, the SSO fully reviewed and considered the findings set forth therein. Under these circumstances, the Northrop objection is meritless.

IV. CONCLUSION AND RECOMMENDATION

For the reasons set forth above, the ODRA concludes that the Product Team rationally evaluated and reasonably selected Raytheon for contract award as the apparent best value. Accordingly, the ODRA recommends that the Administrator deny the Protest in its entirety.

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/S/

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APPROVED:

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